

Environmental Management Systems at the Region III Office





What is an Environmental Management System (EMS)?

- A systematic approach to reducing or eliminating the adverse impacts that the Regional Office's supplies, products, and activities, and services have on the environment.
- A collection of documents that contains the Regional Office's environmental policy, plans, implementation procedures, evaluation methods, and management review process.
- An EMS provides a systematic way to review and improve operations for better environmental performance.



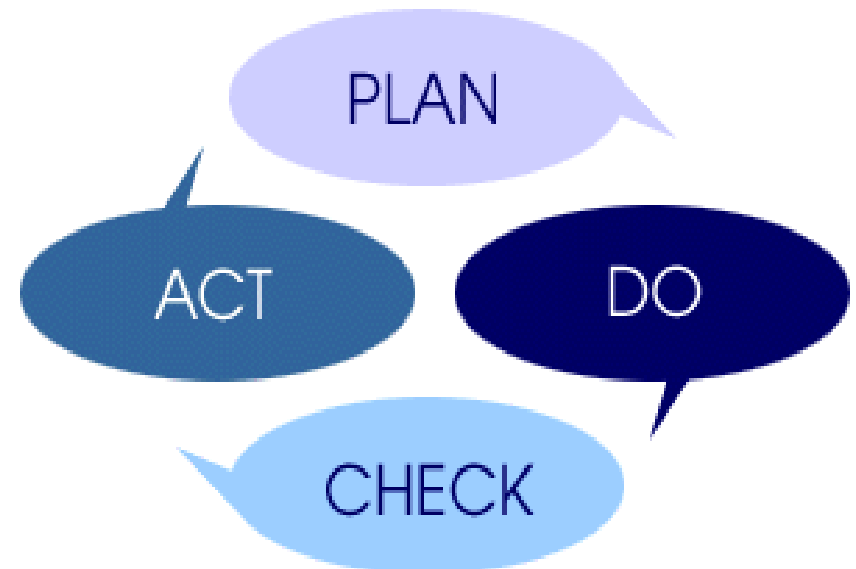
Outcomes of an EMS

- Prevent pollution;
- Continuous Improvement;
- Use materials more efficiently;
- Streamline operations;
- Potential cost savings;
- Employee participation and satisfaction.



Stages of an EMS

- Commitment and policy;
- Aspects and impacts;
- Implementation;
- Evaluation;
- Review.





Why Implement an EMS at Region III?

- To become more fully aware of the adverse environmental impacts of all Region III activities with a focus on reducing or eliminating those impacts.
- To reduce the amount and cost of resources by eliminating wasteful practices.
- Comply with Executive Order 13148 and Administrator's Position Statement.



Executive Order 13148

- *"Greening the Government Through Leadership in Environmental Management".*
- Signed on April 21, 2000.
- Head of each Federal agency responsible for integrating environmental accountability into agency decisionmaking and long-term planning processes across all activities and functions.
- Environmental management considerations to be a fundamental and integral component of Federal Government policies, operations, planning, and management.



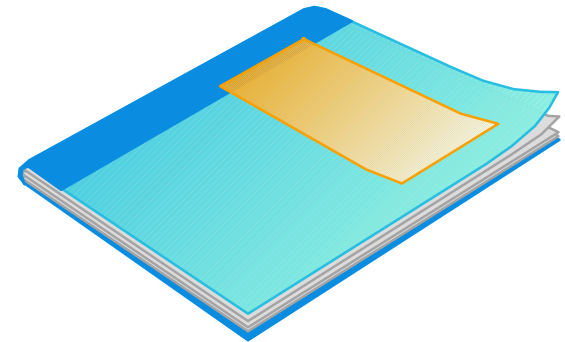
Administrator's Position Statement

- Supports Executive Order 13148.
- Signed May 2002.
- Advocates the use of an EMS as the mechanism for achieving the goals of the EO.
- Encourages the use of recognized EMS frameworks such as ISO 14001.
- EPA will lead by example by implementing EMSs at appropriate EPA facilities.



Region III Policy

- Commits Region III to implement an EMS.
- Enacted September 16, 2002.
- Signed by the RA, DRA and all senior managers.
- Posted throughout the office.
- Can review on Region III EMS website.





Region III Policy

- To manage our organization and our programs in a manner that protects the environment, the safety of our employees, and public health by:
 - ▶ Comply with all regulations;
 - ▶ Consider environmental impacts;
 - ▶ Implement continuous improvement;
 - ▶ Prevent pollution;
 - ▶ Provide training;
 - ▶ Establish objectives and targets;
 - ▶ Recognize and reward accomplishments;
 - ▶ Work cooperatively with stakeholders;
 - ▶ Communicate.



Methodology

- Create an EMS Development Team:
 - ▶ Representatives from each division/office;
- Brief all employees about the EMS development process;
- Solicit input from all employees throughout the process;
- Hire a consultant to provide guidance.



What is expected of employees?

- Identify additional aspects and impacts;
- Identify possible solutions;
- Implement solutions;
- Identify non-conformances.



Schedule of Activities

- Briefing for Senior Management - April 2002
- Creation of EMS Development Team - June 2002
- Creation of Environmental Management Policy - September 2002
- Identification of environmental aspects and significant environmental impacts by Development Team - December 2002



Schedule of Activities

- Employee Awareness Training -- February through March, 2003
- Develop programs to address significant impacts, including objectives and targets - March 2003
- Designate responsible parties and develop a schedule for achievement of objectives and targets - May 2003
- Update for all employees on current EMS effort - May 2003
- Management review of EMS - May 2003



Elements of an EMS

- ISO 14001 Framework;
- Environmental aspects and impacts;
- Identifying "significant aspects";
- Objectives and targets;
- Environmental management programs;
- Operational controls;
- EMS audit;
- Review by site management.



ISO 14001 Framework





ENVIRONMENTAL MANAGEMENT SYSTEM





Identifying Significant Aspects

- Investigate all activities.
- List all aspects related to activities.
- Assess potential impacts for significance.
- Designate significant aspects
- For each significant aspect, list all pertinent activities



Aspects and Impacts

- An environmental aspect is an element of an organization's activities, products or services that can interact with the environment (similar to a hazard).
- Broader than regulated exposures.
- EMS is designed to address environmental aspects.
- Impacts cause a change in the environment.
- Significance reflects the volume, frequency, toxicity, public perception and cost.



Identifying Aspects

- Environmental Concerns
 - ▶ Severity of impact
 - ▶ Duration of impact
 - ▶ Probability of occurrence
 - ▶ Scale of the impact
- Organizational Concerns
 - ▶ of stakeholders
 - ▶ Cost of addressing impact
 - ▶ Effect on public image
 - ▶ Effect on other activities
 - ▶ Potential legal exposure

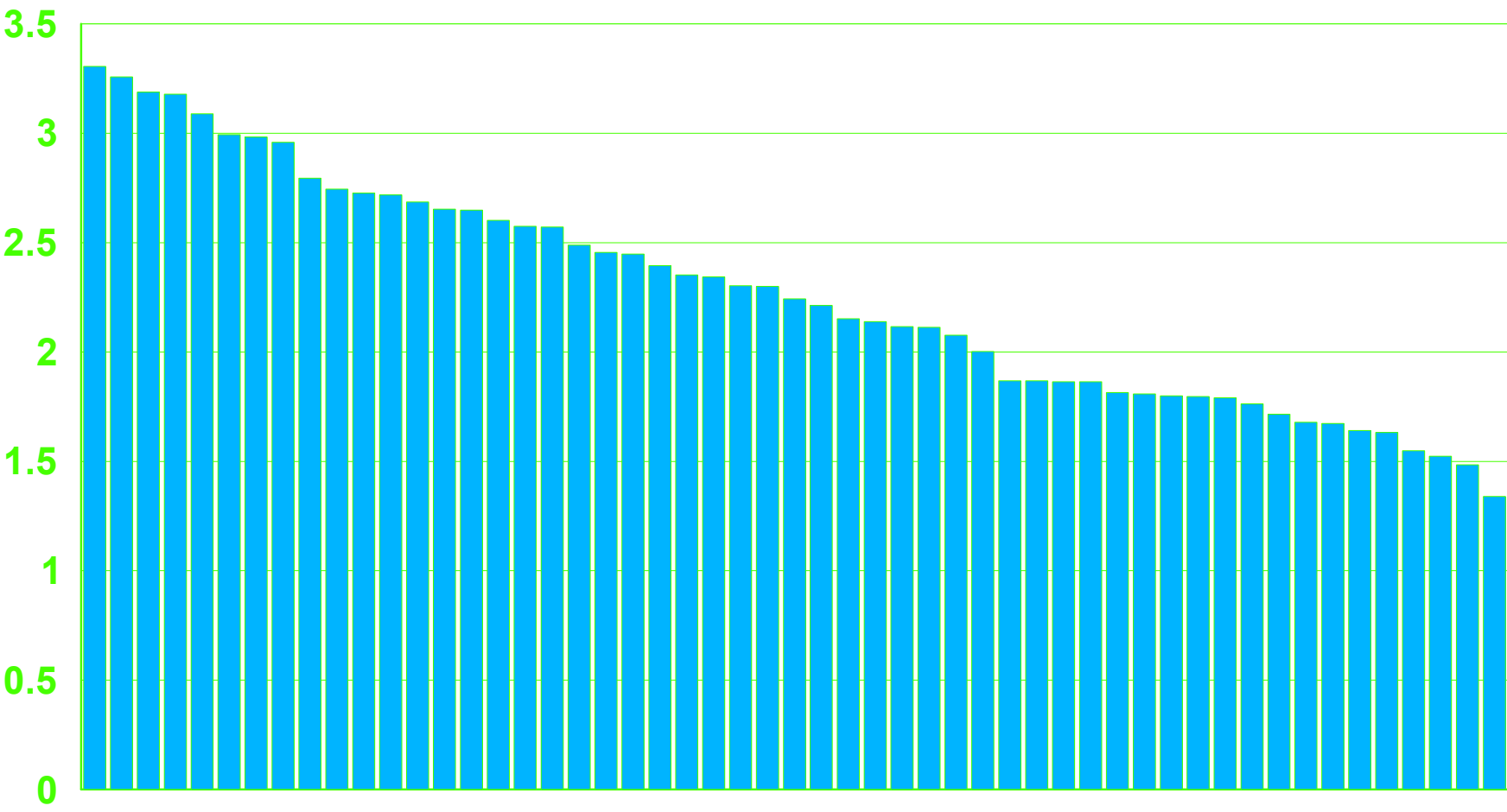


Top 8 Aspects

- Petroleum Use in Transportation of Employees
- Use of Paper in Operation of Business Machines
- Generation of Waste from Transportation of Employees
- Use of Electricity in Operation of Computers
- Use of Electricity in Illumination of Office Space
- Use of Electricity in Operation of Business Machines
- Use of Paper in the Production of Reports and Documents
- Use of Electricity for Air Conditioning and Ventilation

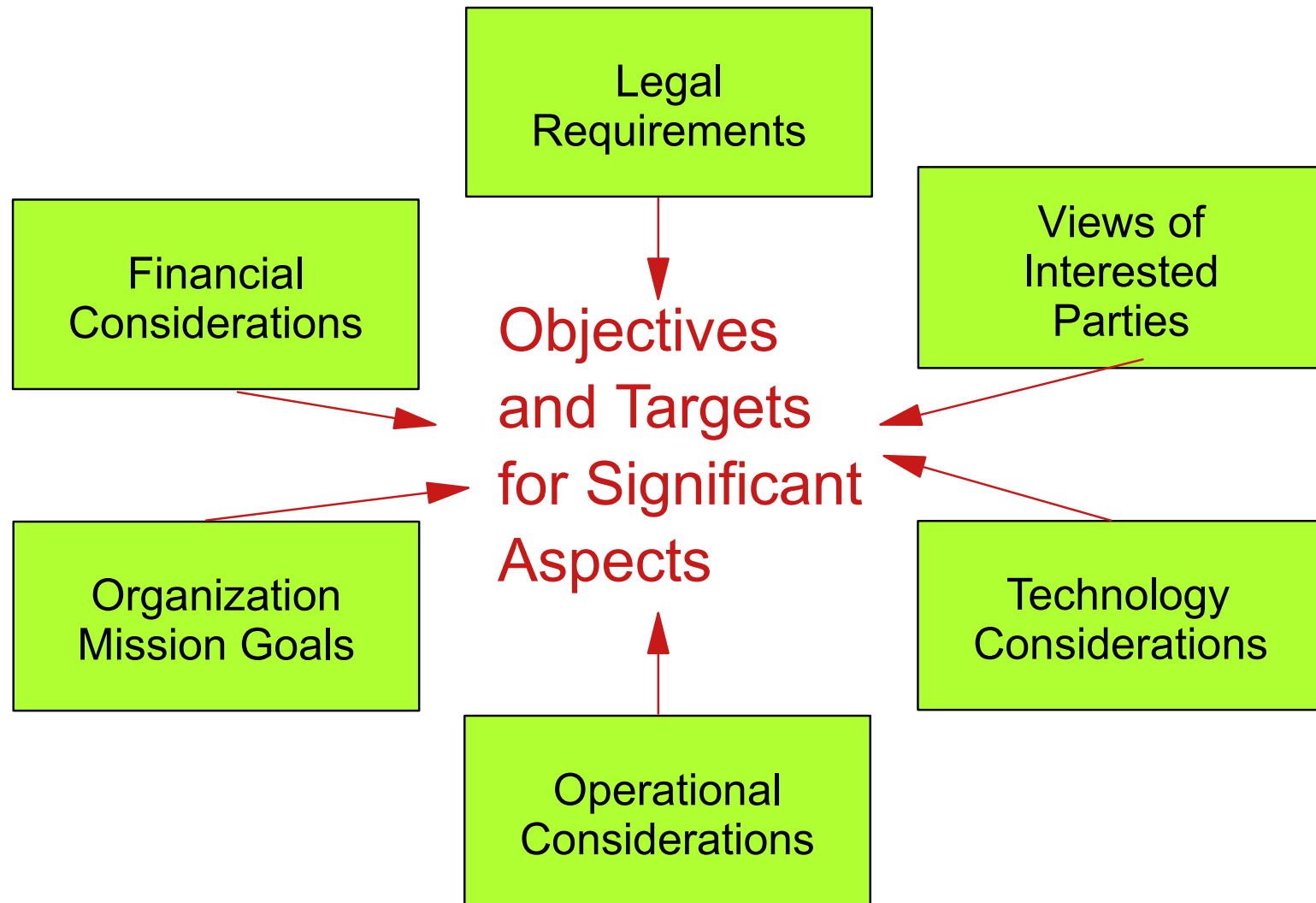


Region III EMS Aspects Ratings





Objectives and Targets





Operational Controls

- Controls ensure processes, activities, operations remain within specified operating criteria:
 - ▶ Engineering controls,
 - ▶ Administrative controls.
- Specified for all processes, activities, operations, products, services that have significant aspects.



EMS Audit Elements

- Verifies existence and implementation of EMS.
- Looks at commitment by management and employees.
- Requires knowledge of systems and processes
- The EMS audit is more than a compliance audit.



Review By Management

- Periodic management assessment of EMS effectiveness.
- EMS champion makes sure all inputs are available for review by management.
- EMS champion ensures that review decisions are incorporated to improve the EMS.



Staff Involvement in EMS

- Development, Implementation, Maintenance:
 - ▶ Employee involvement in EMS development essential,
 - ▶ Continuing performance improvement,
 - ▶ Follow-through after implementation.



Employee Involvement in EMS Development

- Additional aspect identification;
- Conformance with operational controls;
- Training;
- Development of performance indicators,
- Employees must know objectives and targets of pertinent significant aspects within their work area/responsibility.



Management's Role

- Ensure continuing momentum;
- Monitor progress and performance;
- Ensure continuing availability of resources;
- Partake in goal setting;
- Recognize efforts.



Importance of EMS to EPA

- Agency wide EMS support.
- EPA to be evaluated against other agencies.
- Score card being developed for government agencies.



For More Information About Region III's EMS Visit the Web Site!

- <http://epawww.epa.gov/r3intra/EMS-Web/index.htm>



Please [click here](#) to acknowledge your completion of this EMS training course.

- This will allow us to track and document who has taken the on-line EMS training.